

5

minimum in order to reduce the extent to which the firearm 14 has to be modified in order to incorporate the device 10. The device 10 may be modified in order to facilitate placement in a rifle or shotgun. Again, model specific modifications may have to be made in order to accommodate the device 10. It should be noted that these modifications are minimized since the firing pin, and not the hammer or trigger or other element, is disabled. Systems which disable the hammer or trigger tend to be even more model specific since the spacing of these components of the firing mechanism varies from weapon to weapon. Also, the firing pin 12 does not have to be moved in order to disable the weapon.

In operation, the user picks up the firearm 14 and places his hand over the scanner 20. Preferably, the scanner 20 is positioned so that a "normal" hand grip will cause activation of the scanner 20. Once the scanner 20 is activated, the finger or thumb print is scanned and compared to the stored finger print or prints in order to determine if the system should remain armed (i.e., if firing should be disabled). Once the microprocessor 22 has confirmed a match, the post 36 is pulled down and out of engagement with the firing pin 12, and the red LED 31 is activated indicating that the firearm 14 may be fired.

In an alternative embodiment, the scanner may continually scan the finger or thumb print of the user and become disable when either there is no finger or thumb print, or a thumb print not previously stored in the microprocessor 22 is detected.

The firearm 14 may be continually fired until the user depresses the safety switch 44, which resets the system, and requires another fingerprint match before the device 10 will allow operation of the firearm 12. Alternatively, the system may time out after a predetermined time which may be stored in the microprocessor 22 ROM, or programmed into the microprocessor 22 RAM and thus be adjustable by the user. Thus, the device 10 operates as "part-time" disabling mechanism which is especially useful in the fields of law enforcement. The device is particularly effective at reducing the incidence of police officers having their guns taken and then used on them. The device 10 is not designed as a long term firearm disabling device, trigger locks and other devices should be used in conjunction with this device for safe storage.

It is to be understood that the provided illustrative examples are by no means exhaustive of the many possible uses for my invention.

6

From the foregoing description, one skilled in the art can easily ascertain the essential characteristics of this invention and, without departing from the spirit and scope thereof, can make various changes and modifications of the invention to adapt it to various usages and conditions.

It is to be understood that the present invention is not limited to the sole embodiment described above, but encompasses any and all embodiments within the scope of the following claims:

I claim:

1. A firearm incorporating a safety device, said firearm having a firing pin for impacting ammunition which may be loaded into said firearm, the firearm incorporating a safety device comprising:

a scanner capable of scanning a finger or thumb print and generating data representative of said finger or thumb print;

a microprocessor connected to said scanner for receiving said data, said microprocessor having memory means for storing data representative of at least one finger or thumb print and a source of power;

a disabling mechanism proximate to said firing pin, said mechanism having a disabling actuator for selectively moving into and out of engagement with said firing pin thereby selectively enabling and disabling said firing pin in response to a control signal from said microprocessor;

indicator means operatively connected to said microprocessor for indicating whether said firing pin is in the operable or inoperable position;

wherein said disabling mechanism includes a spring loaded solenoid which is biased to maintain said firing pin in an operable position when said source of power is exhausted.

2. The device of claim 1 wherein said indicator means can also provide an indication of the state of said source of power.

3. The device of claim 1 wherein said disabling actuator includes a vertically moving post sized for engagement with a recess formed within said firing pin.

\* \* \* \* \*